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REMARKS

This Reply, which is in response to the final Office Action mailed March 17, 2008, is being filed within two months of the mailing date of the final Office Action. Claims 13-16, 23-26 and 33-46 are under examination. Claims 33-37, 42 and 44 are being amended. No claims are currently being canceled or added. Based on the following remarks, Applicants respectfully request reconsideration and withdrawal of the outstanding rejections.

I. Drawings

New Figure 7 is submitted herewith, per the request of the Examiner. Support for Figure 7 is provided in the application as originally filed (e.g., in paragraphs [0026] and [0027]). Thus, no new matter is being added. Applicants respectfully request that new Figure 7 be accepted. The specification has also been amended to make reference to new Figure 7.

II. Brief Summary of Claim Rejections under 103(a)

Claims 13-16, 23-26 and 33-46 were rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Success Maker Math Concepts and Skills (hereafter MC&S) in view of U.S. Patent No. 5,616,033 to Kerwin (hereafter Kerwin).

For at least the reasons discussed below, Applicants respectfully traverse this rejection.

III. Independent Claims 13 and 23

On page 3 of the Office Action, it is stated that "MC&S fails to disclose with details the specifics of the review process, yet it specifies that the reviews are individually customized and that the difficulty level plays a role in the process."

On page 3 of the Office Action, it also stated that Kerwin discloses that a "student is given the material at least a second time after having answered it correctly."

At the bottom of page 3 and top of page 4 of the Office Action, the Examiner appears to state that column 4, line 63 – column 5, line 3 of Kerwin discloses "wherein the specific area has a difficulty level, and the specific area is selected for the user to work on for the second time depending on the difficulty level or the specific area, or wherein the specific area is selected for the user to work on for the second time depending on the level achieved by the user in the assessment of the user, not just the user being assessed to have achieved at least a passing grade or to have understood the specific area."

The Examiner thereafter, on page 4 of the Office Action, alleges that a person of ordinary skill in the art upon reading Kervin would have recognized that there are a limited number of triggers that could be used to determine the scheduling of repeated subjects, including but not limited to difficulty level, and skill level attained. Relying on this allegation, the Examiner argues that claims 13 and 23 are obvious.

Applicants respectfully disagree with the obviousness rejection, as explained below in the discussions of MC&S and Kerwin.

A. Discussion of MC&S

MC&S only suggests reviewing skills that the student has not yet mastered. There is no teaching or suggesting in MC&S that an area is presented to a student for a second time after the student has been assessed to have achieved at least a passing grade on the area, or to have understood the area. Rather, MC&S clearly teaches away from the claimed features of claims 13 and 23 by repeatedly, consistently and unequivocally suggesting that only the skills that the student has not yet mastered be reviewed. This is evident from the following sections of MC&S, which are quoted verbatim (with emphasis added),

- **"Individualized reviews helps each student master difficult skills. *When a student demonstrates difficulty with a particular skill, it is reviewed in one of two ways. If the skill is from a computation strand, it is repeated before the student proceeds* because it is a skill that needs building before the student advances. If it is from an application strand, the skill is *marked for review and presented again later while the student continues to progress through the strand*. With this delayed review, students improve and build new skill, returning later to review previously difficult applications."**¹
- **"The timing of review should be flexible to accommodate different instructional needs. Thus, *if a student has difficulty with a skill from a computation strand, review is presented immediately*, because mastery of the current skill is necessary before the student can progress to the next skill. *In the application strands, delayed review is appropriate because it allows the student to progress through the course; later, when the student may be better prepared, he or she returns to the material in need of review.*"**²
- **"Students generally master most skills within 20 exercises. *If a student does not demonstrate mastery after 20 exercises, that skill is marked for review*. Skills from the computation strands are placed in immediate review, whereas skills from the application strands are set aside for delayed review."**³
- **"*Excellent student performance*" causes "*Pass the current skill. Select and present the next skill.*"⁴ MC&S considers a student to have "passed" the current skill if the student's performance is excellent. Once a student is considered to have "passed" the current skill, the next skill is selected and presented, and the passed skill is not repeated.**
- **"Student has *not yet reached mastery* after 20 exercises" causes "*Mark the skill for review*. If the skill is from a computation strand, review immediately. If the skill is from an application strand, review later."⁵**
- **"*If the student has not met the passing criterion for a skill* objective after completing 40 exercises form that class, *the student moves ahead to the next skill objective*. Although the student does not receive lower placement in the strand when having difficulty with a given skill, prerequisites for the skill are presented in addition to sequential practice in the skill and any available tutorials. *By using various types of remediation when the student encounters difficulty, the system attempts to maintain the student's progress through the course.*"**⁶

¹ See last paragraph on page 1 of MC&S, emphasis added.

² See item 8 on page 8 of MC&S, emphasis added.

³ See last paragraph on page 17 of MC&S, emphasis added.

⁴ See Row 1 of Table 2 at top of page 18 of MC&S, emphasis added.

⁵ See Row 6 of Table 2 at top of page 18 of MC&S, emphasis added.

⁶ See first full paragraph on page 18 of MC&S, emphasis added.

It is clear from the above quoted portions of MC&S, that MC&S only repeats skills that the student has difficulty with/has not yet mastered or passed. MC&S does not repeat skills that the student has been considered to have mastered or passed.

Further, note that the term "difficulty" as used in MC&S is subjective from the standpoint of the student. In contrast, in claim 13, it is a specific area that has difficulty level, not the user having difficulty with the specific area.

In the discussion of claims 36-37 on page 6 of the Office Action, it is alleged that since MC&S discloses grade levels, it would have been obvious to one of ordinary skill in the art to try using achievement level to determine which material to be repeated and how many times. Applicants disagree. As can be seen, for example, from Figure 1 on page 8 of MC&S, the grade levels are used to specify which grades should be taught which strands. This has nothing to do with repeating previously taught areas. As explained above, MC&S clearly only repeats materials that the student has not yet mastered or passed. MC&S does not teach or suggest repeating skills that the student has been assessed to have achieved at least a passing grade or to have understood.

B. Discussion of Kerwin

Kerwin explains that questions are immediately repeated if a trainee gets a question wrong, until the trainee makes the correct selection.⁷ Further, Kerwin explains that even if the first time through the trainee makes a correct selection, the system will subsequently repeat the situation/simulation at least once.⁸ In Kerwin, a situation/simulation is repeated at the desire of the trainer/administrator, allowing the repetition to occur at any desired point.⁹

Contrary to what was stated in the Office Action, column 4, line 63 – column 5, line 3 of Kerwin, does not disclose "wherein the specific area has a difficulty level, and the specific area is selected for the user to work on for the second time depending on the difficulty level or the specific area, or wherein the specific area is selected for the user to work on for the second time depending on the level achieved by the user in the assessment of the user, not just the user being assessed to have achieved at least a passing

⁷ See column 4, lines 59-63 of Kerwin.

⁸ See column 4, lines 64-67 and column 5, lines 24-30 of Kerwin.

⁹ See column 5, lines 40-52 of Kerwin.

grade or to have understood the specific area.” Rather, Kerwin discloses that “even if the first time through the trainee makes a correct selection, the system will subsequently repeat the situation/simulation at least once ... at the discretion and under the control of the ... training/system administrator.”¹⁰

C. MC&S and Kerwin do not teach or suggest Claims 13 and/or 23

MC&S clearly teaches away from the claimed invention by only repeated skills that the student has not mastered/has difficulty with. In MC&S, where a student has mastered a skill, the student moves onto the next skill without returning to the mastered skill.

As mentioned above, the Examiner alleges that upon reading Kerwin one would have recognized that there are a limited number of triggers that could be used to determine the scheduling of the repeated subjects, including but not limited to difficulty level, and skill level attained. Applicants’ respectfully disagree. First of all, there are no teachings or suggestions in Kerwin on different triggers regarding repeating a subject. Also, Applicants submit that there are millions of triggers regarding repeating to a user the presentation of specific materials (or materials for which a user has already been assessed to have achieved at least a passing grade or to have understood). To illustrate the numerous possibilities, Applicants put forward the following example:

- All specific materials are presented again
 - Among them, some are presented three times, others four times
 - Among those presented three times, some are presented sooner than others
 - For those that are presented sooner, some are presented at different paces than others, such as at a slower pace
 - For those presented at a slower pace, some are presented in different ways, such as one visually, the other orally, a third based on scenario, a fourth via hands-on experiment

¹⁰ See column 4, line 63 – column 5, line 3 of Kerwin.

- For those presented visually, one is via a 17" screen, and the other via a cell phone's small screen
 - For those via a 17" screen, the materials are timed to be presented to a number of users simultaneously in a collaborative manner
 - And so on...

The above is just one line of examples, with each branch capable of having many options. Some of the above approaches may be difficult to implement, but they just serve as an illustration of numerous possibilities from one set of examples.

In any event, as is evident at least from the example shown above, contrary to the Examiner's suggestion, there can be millions of triggers regarding repeating specific materials to be presented to a user, after the user has been assessed to have achieved at least a passing grade or to have understood the materials. Stated another way, there can be millions of criteria upon which a specific area can be selected for the user to work on for the second time, after the user has previously been assessed to have achieved at least a passing grade or to have understood the specific area.

Kerwin merely says that a situation/simulation gets repeated because repetitions are useful. Though there are numerous triggers upon which repetition of already understood materials can be based, Kerwin gives no further guidance, other than saying repetition is at the discretion of a trainer/administrator.

Further, Applicants respectfully assert that the Examiner is using impermissible hindsight when the Examiner said it would have been obvious that specific materials (for which the user has already been assessed to have achieved at least a passing grade or to have understood) be repeated for a second time based on the difficulty level of the specific materials (as in claim 13), or based on the level achieved by the user, not just achieving at least a passing grade or to have understood (as in claim 23).

For at least the reasons set forth above, Applicants respectfully request that the Examiner reconsider and withdraw the rejections of independent claims 13 and 23.

IV. Dependent Claims 14-16, 24-26 and 33-46

Dependent claims 14-16 and 33-42 depend from and add additional features to independent claim 13. Applicants assert that these claims are patentable for at least the reasons discussed above with regards to claim 13, as well as for the features that they add.

Dependent claims 24-26 and 43-46 depend from and add additional features to independent claim 23. Similarly, Applicants assert that these claims are patentable for at least the reasons discussed above with regards to claim 23, as well as for the features that they add.

For illustration purposes, the following discusses rejections regarding features in some of the dependent claims.

Claims 15 and 25

Regarding claims 15 and 25, the Office Action alleges that page 9 of MC&S teaches the following limitations: (a) transmitting at least a portion of the materials via a network to a device to be presented, and (b) the network including a private network and a public network. The support for the Office Action's allegation is that on page 9 MC&S teaches "practice exercises generated so that the student may improve his/her skill level, also the fact that the product was developed by Computer Curriculum Corp. and includes a Graphics library implies the use of computer network systems."¹¹ Applicants respectfully disagree.

First of all, on page 9, MC&S teaches "the system presents an appropriate exercise, selecting numbers from a given range and appropriate pictures from the graphics library to create individual exercises for each student." The fact that MC&S discusses selecting pictures from a graphics library to create exercises does not teach or suggest the use of a computer network.

Also, whether the product in MC&S was developed by Computer Curriculum Corp does not make the claimed limitations obvious. Unless the Examiner can provide evidence showing Applicants' claimed invention being used by Computer Curriculum

¹¹ The first paragraph on page 5 of the Office Action.

Corp. at least before the filing date of Applicants' patent application, whether the product in MC&S was developed by Computer Curriculum Corp. is irrelevant to the claims.

Finally, there are no teachings or suggestions in page 9 of MC&S on (a) transmitting materials via a network to a device to be presented, and (b) the network including a private network and a public network.

For at least the reasons set forth above, Applicants respectfully request that the Examiner reconsider and withdraw the rejections of dependent claims 15 and 25.

Claims 33-35 and 42

The Office Action alleges that Kerwin suggests Applicants' claims 33-35 and 42 in its col. 4:63 to col. 5:3. Applicants respectfully disagree. As explained above, Kerwin merely teaches that a situation/simulation gets repeated because repetitions are useful. Since Kerwin gives no further guidance, other than teaching that repetition is at the discretion of a trainer/administrator, Kerwin could not have suggested the detailed limitations recited in Applicants claims 33-35 and 42, where

- The specific area is selected for the second time also depending on a time elapsed since the user has been assessed to have achieved at least a passing grade or to have understood the specific area
- The specific area is selected for the second time also depending on the time elapsed being more than a predetermined duration of time
- The specific area can be selected again, but if the time elapsed is more than a predetermined duration of time, the specific area is not selected again

If Kerwin and/or MC&S have taught or suggested such detailed features, Applicants respectfully request identifying them, as this is required under 37 C.F.R. 1.104(c)(2). If the two references have not, the examiner is respectfully requested in accordance with MPEP 2144.03 to cite one or more references in support of his assertions of obviousness.

Claims 36 and 37

The Office Action again rejects claims 36 and 37 based on similar arguments as those used against claim 13. Applicants respectfully disagree.

As explained above, MC&S teaches away from repeating a passed or an understood area, while Kerwin, with millions of possible triggers for reviews, just teaches repeating at the discretion of a trainer/administrator. There could not possibly be any teaching or suggestion in MC&S and Kerwin, singly or in any combination, of

- The specific area is selected for the user to work on for the second time depending on the difficulty level of the specific area
- The specific area is selected for the second time also depending on a level achieved by the user in the assessment of the user, not just the user being assessed to have achieved at least a passing grade or to have understood the specific area
- The specific area is selected for the second time if the level achieved by the user in the assessment of the user has not exceeded a predetermined threshold

Again if Kerwin and/or MC&S has taught or suggested such detailed features, Applicants respectfully request identifying them, as this is required under 37 C.F.R. 1.104(c)(2). If the two references have not, the examiner is respectfully requested in accordance with MPEP 2144.03 to cite one or more references in support of his assertions of obviousness.

Claims 39 and 45

Claims 39 and 45 include the limitations of the specific area repeatedly selected for the user to work on, depending on the number of times the specific area has been previously selected for the user to work on. The Office Action argues that MC&S provides such teaching. Applicants respectfully disagree. Since MC&S teaches away from repeating a passed or an understood area, MC&S could not possibly have taught or suggested repeatedly selecting a passed or an understood area for the user to work on, let alone repeatedly selecting such an area depending on the number of times the area has been previously selected for the user to work on.

Claim 40

Claim 40 includes the following limitations:

- Analyzing test results using a relationship rule to suggest certain activity for the user, wherein the relationship rule defines at least a relationship between at least two areas of the subject
 - A specific area is one of the at least two areas of the subject that the relationship rule defines at least a relationship
 - the certain activity suggested includes working in an area of the subject that relates the at least two areas of the subject
- after the initial selection and presentation of materials regarding the specific area of the subject to the user, and further after the user has been assessed to have achieved at least a passing grade or to have understood the specific area, selecting one or more other areas of the subject for the user to work on
- after selecting the one or more other areas of the subject for the user to work on, selecting the specific area of the subject for the user to work on for a second time, wherein the specific area has a difficulty level, and the specific area is selected for the user to work on for the second time depending on the difficulty level of the specific area

The Office Action rejects claim 40 alleging the following:

- MC&S and Kerwin both disclose the specific area being one of two areas that a relationship rule defines a relationship
- The activity suggested includes working in an area relating the two areas
- Kerwin describes a relationship within the questions presented in its col. 3:42-47
- MC&S in its appendix A describes an incremental difficulty level of associated exercises being presented to the student

As described above, MC&S teaches away from repeating the specific area as in Applicants' claimed invention. Regarding Kerwin, it is not clear where it teaches or suggests the specific area being one of two areas that a relationship rule defines a relationship.

With both MC&S and Kerwin not teaching or suggesting Applicants' specific area being one of two areas that a relationship rule defines a relationship, both references could not have taught or suggested the activity suggested including working in an area relating the two areas.

Regarding Kerwin's col. 3:32-47, it pertains to that (a) trainees are instructed to prepare narrative descriptions of their proposed actions to situations/simulations, (b) after completing the descriptions, trainees are presented questions relating to the then-presented situations/simulations, and (c) considerations relating to the selected answer are displayed. It is not clear where in the above section or how in the above section, Kerwin teaches or suggests the detailed interrelated limitations in claim 40.

In its Appendix A, MC&S provides many exercises at different levels for different strands. Again it is not clear where in the exercises or how in the exercises, MC&S teaches or suggests the detailed interrelated limitations in claim 40.

Rejection on obviousness grounds cannot be sustained by mere conclusory statements. Instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. Otherwise, the Office Action has used hindsight to conclude that the claimed invention was obvious, which is improper.

For at least the reasons set forth above, Applicants respectfully request that the Examiner reconsider and withdraw the rejections of dependent claim 40.

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V. Conclusion

It is submitted that claims 13-16, 23-26 and 33-46 are patentably distinct from the cited references, for at least the reasons set forth above. Reconsideration and withdrawal of the outstanding rejections and issuance of a Notice of Allowance are earnestly solicited.

In the event that the Examiner, upon reconsideration, determines that an action other than an allowance is appropriate, the Examiner is requested and authorized to telephone Applicants' undersigned representative prior to taking such action, if the Examiner feels that such a telephone call will advance the prosecution of the present application.

Any required fee in connection with the filing of this response is to be charged to Deposit Account No. 50-0727.

Respectfully submitted,

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